



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/586,267

07/14/2006

Nigel Paul Schofield

M03B327

7751

71134

7590

07/08/2009

Edwards Vacuum, Inc.

2041 MISSION COLLEGE BOULEVARD

SUITE 260

SANTA CLARA, CA 95054

EXAMINER

TRIEU, THERESA

ART UNIT

PAPER NUMBER

3748

MAIL DATE

DELIVERY MODE

07/08/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,267	Applicant(s) SCHOFIELD, NIGEL PAUL	
	Examiner Theresa Trieu	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-21 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 3748

DETAILED ACTION

This Office Action is responsive to the applicant's amendment filed on Mar. 20, 2009.

Claims 1-9 and 11-21 have been amended. Accordingly, claims 1-21 are pending in this application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 11-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 11 recites the limitation "wherein the fluid inlet of the second flow path and the fluid inlet of the second flow path are located...the chamber" renders the claims indefinite, because it is unclear what the limitation "the fluid inlet of the second flow path and the fluid inlet of the second flow path" is, as applicant has claimed.

Claims 12-21 are rejected by virtue of their dependence on claim 11.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3748

2. Claims 1-7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Itou et al. (Itou) (Patent Number 5,352,097).

Regarding claims 1, 2 and 9, as shown in Fig. 2, Itou discloses a screw pump comprising: a chamber defining with first and second externally threaded rotors 4, 5 mounted on respective shafts 2, 3 rotatably disposed and adapted for counter-rotation within the chamber a plurality of flow paths having respective fluid inlets 10, 20 wherein a first one and a second one of the respective inlets are located at a common low pressure side of the chamber (see Fig. 2); a fluid outlet 11 is located towards or at a common high pressure side of the chamber; a pump body defining the chamber, the body having first and second opposing plates (not numbered; however, clearly seen in Figs. 1 and 2), and wherein the first and second ones of the fluid inlets 10, 20 are formed in the first plate and the fluid outlet is formed in the second plate.

Regarding claims 3-7, as shown in Fig. 2, Itou discloses the first one and the second one of the respective inlets 10, 20 are formed in a common surface defining the chamber; the first one and the second one of the respective inlets 10, 20 are located on a common plane; a first one and a second one of the plurality of the flow paths merge at the fluid outlet 11 of the chamber; a first one and a second one of the plurality of the flow paths are arranged such that fluid flows along the flow paths in substantially the same direction (see Fig. 2); a first one of the plurality of flow paths is defined between an internal surface of the chamber and an external surface of the first rotor 4, and a second one of the plurality of flow paths is defined between the internal surface of the chamber and an external surface of the second rotor 5.

Art Unit: 3748

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Itou in view of legal precedent.

Itou discloses the invention as recited above; however, Itou fails to disclose the difference pressure between the first and second inlets. It is examiner's position that one having ordinary skill in the screw pump art, would have found it obvious to have utilized a first one of the plurality of inlets is at a pressure higher than a pressure at a second one of the plurality of inlets during pumping, since it is merely design parameters depending on the being used for a particular purposes or solving a stated problem. Moreover, there is nothing in the record which establishes that the claimed pressure different between the first and second inlet, presents a novel of unexpected result (*See In re Kuhle*, 526 F.2d 553, 188 USPQ 7 (CCPA 1975)).

4. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Itou in view of legal precedent.

Itou discloses the invention as recited above; however, Itou fails to disclose the fluid outlet being formed in the second plate. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have positioned the fluid outlet at the second plate, since the fluid outlet would have performed equally well on the second plate or on the side

Art Unit: 3748

of the housing and the mere repositioning of parts not effecting the functioning of the device involves only routine skill in the art , *In re Japikse*, 86 USPQ 70.

Allowable Subject Matter

5. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior Art

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of patent Cygnor et al. (U.S. Patent Number 4,631,009) discloses a dual inlet gear pump.

Response to Arguments

7. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 3748

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Applicant is duly reminded that a complete response must satisfy the requirements of 37 C.F.R. 1.111, including: "The reply must present arguments pointing out the specific distinctions believed to render the claims, including any newly presented claims, patentable over any applied references. A general allegation that the claims "define a patentable invention" without specifically pointing out how the language of the claims patentably distinguishes them from the references does not comply with the requirements of this section. Moreover, "The prompt development of a clear Issue requires that the replies of the applicant meet the objections to and rejections of the claims." Applicant should also specifically point out the support for any amendments made to the disclosure. See MPEP §2163.06 II(A), MPEP §2163.06 and MPEP §714.02. The "disclosure" includes the claims, the specification and the drawings.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa Trieu whose telephone number is 571-272-4868. The examiner can normally be reached on Monday-Friday 8:30am- 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3748

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TT

/Theresa Trieu/
Primary Examiner, Art Unit 3748